

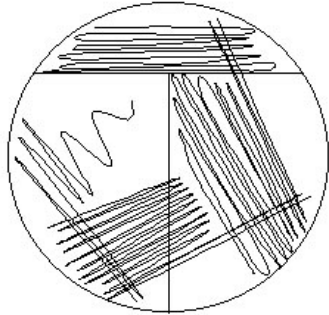


RISK ASSESSMENT – TASK BASED **IGEM 2016**

Location: Room W301, Medical Building	Building Number: 181	Date: February 2016	Assessed By: Amber Willems-Jones	Health & Safety Representative: Vincé Kalangi
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Description of Activity: 4.11 Bacterial Broth Inoculation SWP No: 4.11	
Is there past experience with the Activity that may assist in the risk assessment? Incidents & Near-hits, Incident Investigations, Workplace Inspections, Training, Standards, Legislation & Codes, Uni Guidance Material, Existing Controls, Industry Standards.	NO

1. TASK	2. HAZARD	3. Estimated RAW RISK SCORE C x E x L	4. CONTROLS	5. Residual Risk Score RISK SCORE C E L C x E x L				6. Residual Risk
Autoclaving/Microwaving LB	Burns due to accidental contact with hot bottle	5x6x1	Wear appropriate PPE, Ensure that all training has been undertaken	5	6	0.1	3	LOW
Working near open flame	Burns due to accidental contact with flame	5x6x1	Wear appropriate PPE, Ensure that all training has been undertaken	5	6	0.1	3	LOW
Working with antibiotics	May cause an allergic skin reaction	15x6x1	Wear appropriate PPE.	15	6	0.1	9	LOW
	TOTAL	156		TOTAL				15
Name & Signature of Laboratory Head/ Supervisor or Delegate		Amber Willems-Jones					Date: 11/2/16	
Name & Signature of Person Performing Activity or Task		Robert Naturani					Date: 11/2/16	

Number and Title	PRG# 4.11 Bacterial Broth Inoculation
Name of Laboratory/Department	iGEM Laboratory, Department of Biochemistry
Author, Date Prepared & Date of Review	Author: Robert Naturani Date: February 2016 Review by: February, 2019
Introduction	This experimental protocol describes the procedure to make a Luria Broth based monoclonal bacterial culture.
Principles / Scope	Monoclonal inoculation is necessary for sequencing and must be made according to the protocol below. This will ensure sterility and will prevent contamination by unwanted microorganisms such with or without variant plasmids.
Risk Management	<i>Risk assessments have been prepared and are available in the Risk Register (or attached to the SWP).</i> Raw Risk: LOW Residual Risk: LOW
Safety Management	Hazards: Always wear appropriate personal protective equipment. When handling hot liquids always wear thermal-protective gloves. Risk Controls: A
Licences / Permits	N/A
Training / Competency	The use of the Bunsen burner for sterilization requires that the user be trained prior to independent preparation of this media.
Equipment	
Protocol	<p>Materials</p> <p>200 mL LB Broth (see previous SOP for details)</p> <p>200 μL Ampicillin (100 mg/mL)</p> <p>20x LBA-Agar plates</p> <p>Bacterial Stock/s</p> <p>Note: Ensure sterile technique is used to prevent contamination.</p> <p>Sterilize colony picker: heat to a glow in a Bunsen burner flame, dip in 90% ethanol and repeat.</p> <p>Dip into glycerol stock and mix, remove and spread on plate as in diagram. Sterilize colony picker between strokes.</p> <p>Incubate overnight at 37°C.</p> <p>Add Ampicillin to LB broth to make 100μL/mL LBA medium.</p> <p>Prepare 10 Falcon tubes by labeling and aliquot with 20mL LBA.</p> <p>Sterilize colony picker and pick a single colony from the plate and mix into an LBA aliquot tube using sterile technique.</p> <p>Incubate inoculated broth overnight at 37°C.</p> 
Controls / Calibration	N/A
Waste Disposal	<u>Disposal requirements:</u> Follow PC I guidelines for handling, cleaning and when necessary, disposal of

	bacterial culture and solid wastes.
Emergency Procedures	<p>First aid measures Notify supervisor immediately.</p> <p>Eye contact: Immediately flush eyes with plenty of water for at least 20 minutes and get medical attention.</p> <p>Skin contact: In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Remove contaminated clothing and wash before re-use</p> <p>Inhalation: Move exposed person to fresh air. If not breathing, seek immediate medical attention.</p> <p>Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call medical doctor or 000 immediately.</p>
References	
Authorised By	Amber Willems-Jones